

REMARKS

This Amendment is in response to the Office Action mailed on April 30, 2007. In the Office Action claims 1-27 were pending of which claims 1-27 were rejected.

Claim Objections

In the Office Action, claims 1 and 18 are objected to because of informalities. Claims 1 and 18 have been amended to correct these informalities and to place claim 18 in a better form for U.S. practice. No substantive changes were made. Approval of these amendments and entry of this Amendment is respectfully requested.

Anticipation of claims 1-27 by Samuelson

The Office Action reports that claims 1-27 were rejected under 35 U.S.C. §102(e) as being anticipated by Samuelson, U.S. Patent Application Publication No. 2003/0055776. Of these claims, claims 1, 11 and 18 are independent claims. The reasoning provided in the Office Action is found on pages 3-4 and is generally organized in the manner in which elements are recited in independent claim 1 and dependent claims 5 and 6. The Applicant respectfully points out that the cited language from claim 1 has been amended with an Amendment filed on February 20, 2007 to address the rejection under 35 U.S.C. §101 directed to non-statutory subject matter by the Office Action of October 18, 2006.

In rejecting all pending claims 1-27, the Office Action stated that:

Samuelson teaches a computer-implemented method, system, and computer-readable medium for causing a computer to execute said method for regulating the energy flow in an energy network comprising at least a first and a second area comprising producers and consumers, in which the energy network comprises at least one network connection that limits the transportation capacity of the energy network between said first area and said second area.

Specifically, in rejecting independent claims 1, 11 and 18, and dependent claims 10, 17 and 27, the Office Action stated that Samuelson teaches "fixing isolated energy prices (IEP4, IEP5) in the first area and in the second area in proportion to the intended energy production by the producers and the intended energy consumption by the consumers [0068]; [0070]; [0205]; [0310]; [0992]; [1669]; adjusting said isolated energy prices (IEP4, IEP5) in said first area and in said second area on the basis of simulated transportation of energy over the network connection and on the basis of the available transportation capacity [0990]; [0991]; [1681]; and making data on the energy flow for the first area and the second area accessible to the producers and/or the consumers and/or an operator of the network

connection [1681].” The Office Action cited paragraphs [0068], [0070], [0205], [0310], [0992], [1669], [0990], [0991], and [1681] in Samuelson as showing the cited claim language.

This interpretation of Samuelson is not supported by that document’s disclosure, and is therefore respectfully traversed. Contrary to the assertions made in the Office Action, it is respectfully submitted that Samuelson does not disclose, teach or suggest “fixing isolated energy prices in the first area and in the second area in proportion to the intended energy production by the producers and the intended energy consumption by the consumers; adjusting said isolated energy prices in said first area and in said second area on the basis of a computer simulated transportation of energy over the network connection and on the basis of the available transportation capacity; and accessing energy flow data for the first area and the second area for use by the producers and/or the consumers and/or an operator of the network connections.” Rather, Samuelson deals with a method and apparatus to trade two items: energy and transmission rights for transmitting energy through a flow gate. The method presumes that participants access energy and transmission rights. Participants in the trading method offer for sale bundles of energy in transmission rights and enter bids for buying bundles. The offers and bids are matched by an optimization system that disassembles offered bundles and reassembles other bundles in accordance with bids. The optimization system contracts an order if the aggregate bids for new bundles exceed the aggregate offers for the old bundles.

As noted, for example, in paragraph [0068] cited by the Office Action, Samuelson’s invention provides “automated disassembly and reassembly of energy and transmission rights bundles to efficiently fulfill participant bids.” The cited portion of Samuelson does not disclose, teach or suggest that isolated energy prices are fixed and that these isolated area prices are adjusted by a computer simulation of energy transportation while accounting for available transportation capacity.

In Samuelson, participants can make energy deals. In paragraph [0070], Samuelson teaches an optimization system which calculates an ex ante quote “based on the standing bids and offers for other point-to-point transmission rights currently posted in the system by other participants or market makers.” It is believed that the cited paragraph does not suggest fixing isolated energy prices of separate areas and using these prices for computer simulation of energy flowing through the network, while taking account of network constraints.

In describing certain embodiments of the invention, Samuelson discloses in paragraph [0205] that:

[C]ertified users are primarily approved scheduling entities (ASEs), the control area operators

(CAOs), and the RTO operators (regardless of location). These certified users may participate in the RTO at the operational level, using services of the server system 3500 or web server 3560. (Bracketed material added.)

Also, in paragraph [0310], Samuelson states that "flow gates provide a mechanism for resolving seams issues between control areas." From this, it is clear that the invention of Samuelson suggests that control areas are situated between the flow gates. However, there is no teaching in Samuelson of fixing isolated area prices and computer simulation on the basis of such prices.

As stated in paragraph [0990], a participant's schedule is balanced if "their net position (trading buys-trading sells+scheduled source-scheduled sink) is equal to zero." Then, in paragraph [0991], Samuelson discloses that "it is possible to submit unbalanced order through the Schedule Manager screen and maintain non-zero imbalances up to the scheduling deadline" (Emphasis added). However, the "participant is responsible for resolving these imbalances prior to that market's scheduling deadline by balancing the imbalances with Scheduled assets or bilateral counterparties" (Emphasis added).

In describing the participant's schedule, at paragraph [0992], Samuelson states:

Participants do not have to be balanced in each specific market or location, but they do have to be balanced in aggregate for each product in each Control Area. For example, a participant with 10 MW of excess supply in the NP15 Energy scheduling space and a 10 MW shortage in the SP15 Energy scheduling space would be balanced. (Emphasis added.)

Clearly, these portions of Samuelson provide no support for fixing isolated energy prices and performing a computer simulation using such energy prices.

Next, in paragraph [1669], Samuelson states the following:

The listing also includes a distribution list for each "Control Area" operated by APX, beginning with the word "All" followed by the name of the Control Area (for example "All California" or "All U.K."). The system can figure out if a login is registered in a particular control area, since it knows what market segments a login is registered to trade, and knows what control area each market segment is in. For normal messages, these distribution lists will send the message to all Login IDs registered to trade in the indicated control area that are currently on-line. For Market Notices, these distribution lists will send messages to all Login ID's registered to trade in the indicated control area, whether or not they are currently on-line. There is a similar distribution list for "All Participants"

It is believed that the above paragraph does not disclose or teach the features as set forth in the present invention.

In paragraph [1681], Samuelson states that

Each market and facility is registered to a designated location. Transmission requirements to sell

an order into a particular market may therefore be calculated by multiplying the size of the order by the MWs of each FGR required to deliver 1 MW of energy from the selling facility location to the market location. The "Transmission Price to Sell" is, of course, just these FGR requirements multiplied by their respective prices and summed over all FGRs. Similarly, transmission requirements to buy an order from a particular market may be calculated by multiplying the size of the order by the MWs of each FGR required to deliver 1 MW of energy from the market location to the buying facility location. The "Transmission Price to Buy" is these FGR requirements multiplied by their respective prices and summed over all FGRs.

Again, there is no teaching or suggestion, however, of adjusting prices or of isolating energy prices on the basis of computer simulation of energy transport taking account of the available transportation capacity in the network.

In summary, the applicant maintains his position that Samuelson does not teach or suggest a fix isolated energy prices of separate areas and to use these prices for computer simulation of energy flowing through the network taking account of network constraints.

In rejecting claims 2-4, 12-14, 16 and 19-21, the Office Action referred to the reasoning applied to claims 1, 11 and 18. The Applicant respectfully requests withdrawal of the rejection of these claims based upon the above amendments and remarks.

In rejecting claims 5-9, 15 and 22-26, the Office Action stated that paragraphs [0298], [0300], [0301], [0305], [0362] and [0364-0367] show the "said method and system, further comprising making available transportation capacity at least partially, wherein rights to transportation capacity are made available by the producers and/or the consumers, and wherein the rights to transportation are conditionally made available."

The transmission and flowgate rights, as discussed in the cited paragraphs of Samuelson, pertain to a computer-implemented method, system, and computer-readable medium wherein the rights are available at all times, including a "negative position" which allows the market maker to be billed for the missing transmission rights, paragraph [0300]. In addition, the transmission right bought from a market maker with a negative position is "the same as any other." According to Samuelson, this "means that market makers always have a way to quote a price for any transmission the participants may desire to buy or sell." The method of Samuelson does not teach that the "rights to transportation are conditionally made available."

In the Response to Arguments section of The Office Action, paragraphs [0070] and [0071] in Samuelson are cited for teaching "transmission constraints uncertainty in today's market by employing an optimization system for calculating a quote based on the standing bids and offers for other point-to-

point transmission rights posted in the system by other participants or market makers, wherein said posted transmission rights are optimized/calculated based on available transportation capacity and flow gate constraints.” The cited paragraphs relate to the price at which transmission rights are available. Any uncertainty relates to the price, and not as to whether transmission rights are available at certain times, or at all. In particular, paragraph [0070] discloses that a “participant that finds the quote attractive places an order at any time and is assured that the order will contract at the quoted price.”

In addition, Samuelson teaches, in paragraphs [0026]-[0028], [0048] and [0049], that it is not necessary to fix isolated energy prices because the problem addressed by that reference is that the transferring paths for the energy, more specifically for AC power networks, are uncertain, and that obtaining transmission rights for certain flow gates does not guarantee energy can be transferred between the desired nodes at a predetermined price. So, since the total transmission capacity between the nodes is always sufficient, Samuelson treats the complete network as a single market receiving complete bids from all participants and matching them. This view is further supported in paragraph [0071], which states that “the invention can also provide a joint market for energy and transmission-it provides ex ante quotes for energy at any location, as well as transmission between locations.” Samuelson provides no support for a joint market for energy and transmission with reference to a situation wherein the flow gates do not allow the transmission of energy to be transported.

In view of the foregoing, the Applicant respectfully requests withdrawal of the rejection of all pending claims 1-27. The Applicant respectfully submits that the dependent claims are allowable by virtue of their dependency, either directly or indirectly, from the allowable independent claims. Further, each of the dependent claims recite features that when combined with their respective independent claim and any intervening claims render the claim patentable.

The foregoing remarks are intended to assist the Office in examining the application and in the course of explanation may employ shortened or more specific or variant descriptions of some of the claim language. Such descriptions are not intended to limit the scope of the claims; the actual claim language should be considered in each case. Furthermore, the remarks are not to be considered exhaustive of the facets of the invention which are rendered patentable, being only examples of certain advantageous features and differences, which applicant’s attorney chooses to mention at this time. For the foregoing reasons, applicant reserves the right to submit additional evidence showing the distinction between applicant’s invention to be unobvious in view of the prior art.

Furthermore, in commenting on the references and in order to facilitate a better understanding of

the differences that are expressed in the claims, certain details of distinction between the same and the present invention have been mentioned, even though such differences do not appear in all of the claims. It is not intended by mentioning any such unclaimed distinctions to create any implied limitations in the claims.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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